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This paper examines the status of the America's sealift assets, both commercial and strategic reserves, in light of their role in supporting our Armed Forces. Additionally, it considers how these assets directly affect the National Command Authority's ability to execute its military strategy.

USAWC MILITARY STUDIES PROGRAM PAPER

UNITED STATES STRATEGIC SEALIFT & THE NATIONAL MILITARY STRATEGY

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AN INDIVIDUAL STUDY PROJECT by
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ABSTRACT

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Today's U.S. National Military Strategy is shifting its focus away from its long standing history of containing the Soviet threat through a concept of forward deployment of U.S. forces, with reinforcing forces being drawn from the Continental United States (CONUS). Instead of forward stationing, the United States is modifying its strategy to one that centers around responding to crises worldwide through power projection, primarily with major land & air forces based in CONUS.

With the advent of the "CONUS-based" strategy, the Armed Forces' capability to project its forces rapidly by means of sealift has become even more critical. Since the Spanish-American War, the U.S. has depended on a strong Merchant Marine fleet to deploy forces to the theater of operations. Unfortunately, as America turns to its new CONUS-based strategy and sealift gains in importance, its merchant marine industry is seriously deteriorating.

This paper examines the status of the America's sealift assets, both commercial and strategic reserves, in light of their role in supporting our Armed Forces. Additionally, it considers how these assets directly effects the National Command Authority's ability to execute its military strategy.

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STRATEGIC SEALIFT

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THE NATIONAL STRATEGY

"The National Military Strategy has shifted its focus away from containing the Soviet aggression through forward defense with forward stationed forces. The essence of the change in the strategy is in responding to crises worldwide through power projection - primarily from CONUS"

THE ARMY PLAN (TAP)

INTRODUCTION

In the past fifty years, the United States has found itself entangled in five major wars. Fortunately, all these conflicts have been fought on foreign shores, thus sparing the American homeland from the terrible destruction caused by modern warfare. While this "geographic blessing" has been a great benefit to the American people, it has been a significant strategic and logistical challenge for our Armed Forces. Consequently, the United States has had to transport its soldiers and equipment over great distances to support our national and military objectives.

Since the Spanish-American War, the United States has depended on a strong Merchant Marine fleet to deploy

military forces to the theater of operations. During World War II, Korea, Vietnam, Panama and the Gulf War, America's Merchant Marine transported the majority (90 %) of this equipment. However, during the past 45 years the United States has gradually lost its dominance in the merchant marine industry. The President's 1988 Commission on the Merchant Marine & Defense reached the following conclusions: "There is today insufficient strategic sealift, in both ships and trained personnel, for the United States, using only its resources as required by defense planning assumptions to execute a major deployment in a contingency operation in a single theater such as Southwest Asia."

The recent deployment of a U.S. military force of over 500,000 people has been touted as the largest, most successful operation since World War II. If so, did it prove the Commission incorrect, or did we have to depend on foreign shipping to execute our political and military objectives of the Gulf War? This paper's purpose is to examine the status of America's strategic sealift assets in light of their role in supporting our Armed Forces and how these assets directly affect the National Command Authority's ability to execute its military strategy.

AN EMERGING STRATEGY

The collapse of communism in the Soviet Union and its satellite countries has had a dramatic effect on America's military. Since World War II, the military has planned for the defense of the United States and Western Europe that faced a formidable Soviet threat. To defend American allies such as Korea, Germany and Great Britain, the U.S. has used the forward defense concept as the mainstay in its defense policy since the end of World War II. This concept required the U.S. to maintain large, forward deployed forces in those regions it deemed vital to its national interests. However, it was soon recognized that it was politically and financially impossible to maintain completely the required level of troops neceassary to counterbalance the perceived threat in a forward deployed status. To resolve this problem, the U.S. developed the concept of reinforcing forward stationed forces during times of crisis with troops and supplies from continental United States (CONUS). This reinforcing concept had two major ambitions, first to demonstrate the U.S. resolve in its defense commitments abroad, and secondly to establish/prove its capability to sustain major land forces from the United States. REFORGER (Return of Forces to Europe) exercises have been a direct result of this

reinforcement concept and have been the premier training mechanism in exercising our ability to reinforce forward stationed forces. For more than twenty years these exercises were the primary test of the U.S. sealift capabilities and were used by military planners to define our sealift requirements.

Today, the national leadership has begun discussing a new military strategy. This strategy is predicated upon a CONUS-based military that would have only a few critical units stationed overseas to demonstrate America's resolve to its foreign allies. Instead of reinforcement forces supporting forward based units, this new strategy requires the deployment of force packages from the United States to respond to a crisis situation. The current political and economic pressures on the national leadership make this refocusing of our military strategy inevitable. In response to this new strategy, today's military must prepare to respond rapidly to a crisis situation from CONUS if and when called upon.

NEW MISSION FOR THE FLEET

In July of 1991, the Army Staff developed what it envisions as the new sealift mission to meet its emerging CONUS-based strategy. It requires the movement of two Army

heavy divisions, with enough combat support (CS) and combat service support (CSS), 8700 nautical miles within 15 days. Additionally, follow-on sustainment items must arrive at ports of debarkation within 30 days. The staff's assessment is that just the unit equipment for such a force package would require 18 strategic sealift ships (not including tankers) and 20 roll-on/roll-off (RORO) vessels. The sustainment package to support such a force would require a minimum of 15 to 20 additional vessels.

There has been much debate on the accuracy of the staff's vision of the sealift mission. However, the Mobility Requirements Study (MRS), conducted by the Joint Staff, has, for the past several years, been reviewing the military's requirements. Volume I of the study was released in January 1992 and has validated the Army Staff's movement requirements. Will the United States have such sealift capacity, in the proper mix of vessels to support this new CONUS-based Army — that is the question!

THE COMMERCIAL FLEET

There are two major classifications of vessels used in strategic military operations. The first is the tanker, which is a vessel designed to carry bulk petroleum products. Although the tanker is a valuable resource in

military operations this paper will restrict its examination to dry cargo vessels.

The second major classification used in strategic operations is the dry cargo vessel. Dry cargo vessels are those ships primarily designed to carry general cargo, vehicles, weapons and ammunition. This classification includes breakbulk, roll-on/roll-off (RORO), container, and barge (LASH/SEABEE) ships. The President's Commission on the Merchant Marine has stated that the privately owned. U.S. flagged, dry cargo fleet has progressively declined since 1970. Unfortunately, the Commission has also projected that this decline will continue its downward slide through the year 2000. In 1987 the merchant marine fleet consisted of 199 military useful vessels. 6 Today that figure has dropped below 160 and by the year 2000 will reach an estimated total of something less than a 100 vessels.7 While these newer vessels individually possess greater capacities, they still will not provide the sealift necessary for a global conflict in the year 2000.8

Both industry and governmental experts give various reasons for the fleet's decline, such as the general decline in America's trade balance. All agree, however, that the one major cause is its inability to compete against its foreign competition. In the past the U.S.

government has heavily subsidized its merchant marine fleet, primarily through direct funding and cargo preference laws. Yet the high operating costs, including American labor, continue to place the industry at a competitive disadvantage. However, the outlook on the merchant fleet is not all bleak. Many of the newer dry cargo vessels have larger cargo capacities and are significantly more economical to operate. Additionally, the fleet's newer ships normally require smaller crews and are faster than their predecessors. Such characteristics will make them more competitive in tomorrow's market place.

Each type of dry cargo vessel has its own strengths and weaknesses in the shipment of military cargo.

Transportation planners rank order dry cargo vessels in their importance to military operations as ROROs, barge carriers, containers and breakbulks.

The RORO is the vessel preferred by transportation planners in the movement of unit equipment. Primarily designed to transport wheeled vehicles in large quantities, ROROs are ideal for military operations in improved ports. Many ROROs are in commercial use today. However, the ROROs used in today's commercial markets do have limitations when used for military contingencies. Since they are designed and bu'lt for use in the auto industry, most of their cargo

decks are constructed to support only light weight vehicles. This construction significantly restricts the amount of military equipment that can be transported on each vessel.

The barge carriers are vessels that transport their cargo inside large, self-contained lighters which are discharged while the mother-vessel is at anchorage. These lighters are then floated from the mother-ship to a berth for loading/unloading. Better known as LASH and/or SEABEE ships, these vessels are more than capable of handling today's military equipment. Another major advantage of these barge carriers is that they do not require modern, highly developed port facilities to be effective. The barge's combination of large cargo handling capability and operational flexibility make them highly desirable for military employment. However, their survival in today's commercial market is in question. Like the breakbulk vessel, the container vessel has replaced the barge in the commercial trade and what few barges are presently operating are used for a few highly specialized operations. The barge vessels that will be available for military planners in the future will probably come from the nation's reserve fleet program.

The container ship is the mainstay in today's

commercial industry. It has rapidly taken over the majority of the ocean cargo business, making yesterday's breakbulk vessel practically obsolete. The U.S. military recognized the utility of these vessels for contingency operations in the early 1970's. However, the development of doctrine and procurement of container handling equipment for military units has been extremely slow. The military's reluctance to indorse fully containerization as a concept was primarily based upon the significant restrictions container shipping present. All containers have limited cargo space inside, which significantly restricts their capability to accept large items of equipment. Secondly, container vessels require modern, highly developed port facilities for their loading or unloading. During combat operations, such facilities might not be available or, if available, are easily damaged.

Recent REFORGER exercises and our deployment to

Southwest Asia demonstrated the utility of containerization

for the movement of some military items. These

operations showed that light wheeled vehicles, small

trailers and ammunition are particularly well suited

for containerization. The commercial success of

containerization as a viable concept in today's merchant

fleets quarantees its future for the next several

decades. This commercial viability and the military's increased acceptance of containerization should result in a meaningful reduction in our predicted sealift shortfall.

The final type of militarily significant dry cargo ship is the breakbulk vessel. Breakbulk vessels can accommodate today's military equipment and most are capable of discharging their cargo without special handling equipment, thus they are extremely flexible for military purposes. However, they are also extremely slow during the loading and discharging process and require large a labor force both to load and unload. For example, a typical RORO vessel can usually be fully loaded in less than 24 hours, while a breakbulk vessel with the same load may take several days. Prior to the advent of the container vessels, the breakbulk vessels were the mainstay in both commercial and military operations. While they have maintained some of their utility for use in military operations, their survival in today's commercial market is in doubt. The container vessel has replaced breakbulk shipping in great numbers, and only a few specialized commercial carriers are still using them for daily operations. If any of these vessels are available to the military during contingency operations they will probably come from the Nation's reserve fleet.

AMERICAN SOURCES FOR SEALIFT

In addition to the U.S. commercial fleet, there are three other major sources the military has to provide strategic sealift assets:10

STRATEGIC SEALIFT ASSETS FOR FY 2000

FOS	RORO	22	PARGE	CONT	ОТН
	36(17)	49(49)	7(7)		
8(8)	4(4)	5(2)			
	12(20)	Ø(11)	5(9)	38(77)	9(8
	ø(2)	8(15)	Ø(4)	6(8)	
SHIP	CON	NT-CONTA	INER SH	IP	Ļ
OFF	BB.	BREAKBL	l le		
	8(B)	36(17) 8(8) 4(4) 12(20) 0(2)	36(17) 49(49) 8(8) 4(4) 5(2) 12(20) 0(11) 0(2) 8(15)	36(17) 49(49) 7(7) 8(8) 4(4) 5(2) 12(20) 0(11) 2(6) 0(2) 8(15) 0(4)	36(17) 49(49) 7(7) 8(8) 4(4) 5(2) 12(20) 0(11) 2(6) 38(77) 0(2) 8(15) 0(4) 6(8)

Source: Mobility Requirements Study JCS

* MILITARY SEALIFT COMMAND (MSC) has the primary responsibility for strategic sealift operations for the U.S.'s Armed Services. Additionally, MSC runs a fleet of vessels to provide direct logistical support for the Navy's fleet operations and assets that gather scientific data. To accomplish these various missions, MSC maintains a rather large fleet of vessels. Included in its strategic sealift fleet are numerous dry cargo vessels, tankers and special purpose vessels. The fleet's special purpose vessels include vessels such as the SS Gem State, a crane

ship which provides mobile discharge facilities for nonself sustaining container ships for ports without container handling capabilities and heavy lift ships like the SS Cape Farwell, designed to carry outsized, overweight cargo.

For strategic sealift, the most significant vessels operated by MSC are the Maritime Preposition Ships (MPS) and the Afloat Preposition Force Ships (APS). The MPS fleet consist of 13 dry cargo/RORO vessels, designated to support U.S. Marine Amphibious forces. Organized into three squadrons of three to five ships, each squadron carries 30 days of supplies and equipment to support a Marine Amphibious Brigade. 18 These MPS ships are modern. well maintained vessels positioned in strategic locations to provide a rapid response to any contingency. The APS fleet, like the MPS organization, consist of 13 dry cargo vessels. Its primary purpose is to carry supplies and equipment for the Army and the Air Force. While not constituted to support a designated combat organization, these vessels carry common supplies and equipment required by the Army and Air Force to support their deployed forces. The Army's APS vessels carry generic supplies such as food and repair parts but also unique equipment such as landing craft and tug boats for use in its port operations.

The flexibility and importance of the MPS and APS

fleets cannot over emphasized. They provide the U.S. military a means of forward deploying vital combat supplies and equipment into areas where we do not have basing rights. Additionally, the prepositioning system allows DoD to locate these vessels at hot spots throughout the world before the actual deployment of a military force. For example, an MPS squadron was deployed and discharging in Saudi Arabia before any other vessel could even be loaded in the United States. Likewise, APS vessels arrived in SWA and charged the equipment in less than 15 days from notification. 19

However, with a cost of a million dollars per year to maintain and operate each vessel, the MPS and APS fleets are extremely expensive. In today's time of limited resources, DoD must weigh such costs against the fleet's ability to drastically reduce the reaction time during a crisis.

* NATIONAL DEFENSE RESERVE FLEET (NDRF) - is the second source of U.S. flagged sealift assets outside the normal commercial market. The U.S. government created the NDRF after World War II when it owned more than 5,000 commercial ships. The government, as part of its demobilization process, sold or scraped many of these vessels. However, it placed more than 2,000 into long term

storage for future use in national emergencies. Today, the number of vessels in the NDRF has declined to around 200.14 However, of the current 200 in the NDRF, analysts classify only 125 dry cargo, 10 tankers and 6 troopships as militarily useful. The remaining 59 vessels are unserviceable for both military and commercial use and a major effort to scrap these unproductive vessels is underway. This effort scheduled to be complete by the year 2000 leaving less than 100 vessels in the fleet.15

The concept of a NDRF fleet has outlived its usefulness. The annual maintenance cost for each NDRF vessel is more than \$12,000 and to reactivate one of these old ships cost more than \$2 million. While these costs are extremely high, the real death knell for the NDRF is likely to be the size and types of vessels in the fleet and the time required to activate them. Most of these vessels are World War II vintage breakbulk ships that do not lend themselves to today's military operations. Moreover, it would take anywhere between two and six months to reactivate each ship. With todays emphasis on rapid response by a CONUS based military, it is doubtful that the NDRF fleet would provide any significant sealift in time to be of any great benefit during a short notice conflict.

* READY RESERVE FORCE (RRF) fleet was derived from portions of the older NDRF when the U.S. military and Congress recognized that the NDRF did not provide the military a usable fleet for short notice military operations. Therefore, Congress in the early 1970's authorized the establishment of a fleet specifically to meet defense emergency requirements.

Currently, the fleet is a group of 96 vessels, governed by the Maritime Administration (MARAD) which has been charged with its procurement and management. However, the Military Sealift Command controls the activation and operations of the fleet during contingency operations.

The RRF fleet is maintained at a level that allows its vessels to respond within 5, 10 or 20 days of notification. The vessels, by type and their readiness status (using U.S. Naval standards) are shown below:

TYPE OF SHIP	REA	TOTAL		
	5 DAYS	10 DAYS	20 DAYS	
PREAKBULK CRANE HEAVY LIFT RO/RO TANKER TROOPSHIP	36 7 16 3	#1 # # #	1	51 5 7 17 11
TOTAL	45	24	•	74

Source: MARAD

During Desert Storm the RRF had 78 of the 96 of its vessels called to active duty. 17 The most useful of the activated RRF vessels were eight converted container vessels, known as Fast Sealift Ships (FFS). MARAD purchased these container ships from Sea-Land Corporation at a cost of \$10 million apiece, then converted them into a RORO configuration capable of transporting the Army's largest items of equipment. The FSS concept proved successful in tests during several REFORGER exercises during the mid-80's. These vessels quickly became the Navy's workhorses during the Southwest Asia deployment. The first arrived at its discharge point in less than 14 days. TRANSCOM records show that after the second FFS discharged its load in Saudi Arabia, it and the first one delivered more equipment to SWA than all the airlift had accomplished to that date. 18

The use of the RRF fleet during Desert Storm did however, produce some criticism. While no one questioned the make up of the fleet, numerous problems underscored some significant problems with its dependability. First, only 14 of the RRF vessels activated reached their loading ports on time, primarily due to maintenance problems. Additionally, a recent appraisal of the fleet indicated that because of its current maintenance level, only 51 of

the 96 vessels could be activated as scheduled by MARAD. 19
The same evaluation stated that many of the older breakbulk vessels were no longer useful for the military operations and recommended their elimination from the fleet. In fact, after Desert Storm two of the older vessels from the fleet were withdrawn and replaced with new, more useful ships.

Because all RRF vessels activated did ultimately reach their loading ports and successfully accomplish their assigned missions, it is very difficult to evaluate the RRF's critics. However, it should be recognized that the RRF did provide over 25 percent of all U.S. strategic sealift capacity and a little over 50 percent of the capability to move military unit equipment. 20 While this represented only a very small portion of the total sealift effort during Desert Storm, Adm. Butcher, when he was the Commander of MSC, noted that the activation of all 17 RRF ROROs and the overall performance of the fleet's vessels, which averaged more than 24 years old, was a solid accomplishment. Of the activated RRF fleet he stated "...this is also proof that the RRF concept is sound. This fleet does indeed represent government-owned sealift assets available to meet short-notice, unilateral shipping requirements."21

All considered, one must conclude that the RRF fleet

provides the military planner with a considerable asset when it comes to strategic sealift. However, because of the expense and time it takes to activate RRF vessels, if these assets are used for a short notice contingency, only an early activation decision will insure their timely availability.

In the past several years, both Congress and the JCS recognized the value of the RRF fleet. They are committed to address the fleet's shortfalls and have earmarked more than 1.9 billion dollars to start its upgrade. The President's budget request for FY93 has asked for an additional 1.2 billion dollars for the fleet. This 3.1 billion would provide a significant fund to upgrade the RRF fleet. The Army hopes to get the first vessel as early as 1994, with the following delivery schedule:

TYPE VESSEL	73	74	75	74	97	70	TOTAL
Prepo Vessels Strategic Lift Ships		4		4 2	1 5	4	7
Containers (Lease)		-					•

Source: U.S. TRANSCOM

This type of commitment will permit a significant improvement both in the number and quality of vessels in the fleet. However, many have stated that while this is a substantial beginning, it will not eliminate the country's projected sealift shortfall. MG Fred Elam, Assistant

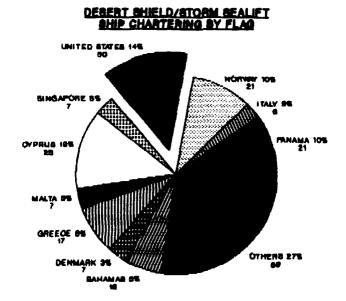
Deputy Chief of Staff for Logistics, estimated that to accomplish the new mission of deploying a CONUS based Army, would require an additional six to eight strategic sealift vessels, at a cost of \$200 million per ship.

The Army has a direct interest in the makeup and the readiness condition of the RRF. It must play a key role in the selection of vessels for the fleet and in the general administration of the RRF fleet. Only then can the Army be assured that the fleet is fully capable in providing the proper strategic sealift to support its CONUS-based concept.

USE OF FOREIGN FLAG VESSELS

As U.S. military moves towards CONUS based forces, it has also begun to adjust its doctrine accordingly. TRADOC Pam 525-5 states "The most likely threats to our national interests through the next decade will see our nation's armed forces employed in operations short-of-war. For the Army, this will mean increased emphasis on operations in support of our friends and allies." Unfortunately, we have seen that our capabilities to deploy forces from CONUS by use of strictly U.S. sealift is highly questionable. Therefore, the use of foreign flagged shipping to deploy U.S. forces is extremely likely. More than seventy-five

percent of the ships used by U.S. TRANSCOM during Desert Storm were of foreign registry. 22



TOTAL 216 (Source MGC)

It is difficult to be very optimistic about the long term reliability of such resources. Even with most of the world in agreement about the U.S. commitment to Desert Storm, we encountered difficulties in obtaining dependable sealift. According to Captain J.F. Kelly USN, MSC "For the Persian Gulf War, we had to hire more than 100 (foreign) ships. They came, by the way, from countries like Japan and even the Soviet Union...and many of them came with

strings attached."²³ In one case the use of a foreign flag vessel resulted in a Japanese crew refusing to enter the declared war zone.²⁴ In others, our allies allowed the use of their commercial vessels, but restricted their use to outside the Gulf. With such restrictions one must seriously question the reliability of foreign sealift in contingency operations.

To avoid the high cost of American labor unions many U.S. merchant marine companies maintain their vessels under foreign flag registry. These vessels, called effective U.S. controlled shipping (EUSC), should be promising targets for recall during a national emergency. However, a 1988 U.S. Federal Court ruling has stated that the government can use these vessels with the owner's concurrence only after a Presidential declaration of emergency. However their availability is contingent on a country-by-country basis.

Overall, the use of foreign flag vessels will provide the military with significant assets for use in emergencies. However, with all the possible strings and conditions that could come with the use of these foreign flag vessels, the strengthening of U.S. merchant marine industry appears the wisest course of action.

THE SEAGOING WORKFORCE

As one would expect, a decline in its seagoing workforce has paralleled the decline in America's maritime fleet. Since 1970 the available number of American mariners has dropped as much as 60%. This decline translates into a loss of manpower for the American Merchant Marine industry from its peak of 60,000 during World War II to today's workforce of 27,000.

Additionally, the average age of an active seamen today is between 45 and 50. During Desert Storm, the biggest personnel challenge facing MSC was the manning of aging vessels with outdated power plants. The criticality of hiring such a workforce was highlighted when, to find enough seamen, it was necessary to recall seamen in their 60's and 70's. The continual decline of the size of the labor force and its aging is particularly alarming. It demonstrates that the number of American's merchant mariners needed to meet possible contingencies into the 1990's may simply not be available.

An aging workforce is not the only problem affecting the use of the RRF fleet. Experience of the nation's seamen is another critical factor military planners must examine. Unlike the modern commercial ships of today, the

RRF fleet consist of vessels predominately powered by steam engines of 1950-60 vintage technology. To operate these power plants efficiently requires years of experience.

Most modern commercial vessels are powered by diesel engines; therefore, few of today's young seamen are taught steam engine operation. The locating of seamen with the necessary experience and knowledge to run such vessels proved to be extremely difficult during Desert Storm. In one case, to staff one of these aging vessels MSC required the recall of one Chief Engineer who was 83 years old. Desert Storm are taught staff to the military use of the RRF than the vessels themselves.

Because of the decline in active vessels in American's commercial fleet today, labor unions are having difficulties finding billets for their members. Based upon this job shortage, unions have been very reluctant to cut any positions held by their members aboard U.S. vessels. The merchant marine industry has repeatedly complained that the labor unions will not help them to stay competitive in the international market place. The industry's position appears justified in that the current crew size of foreign merchant marine vessels average around only 14. However, American merchant vessels, based upon union requirements,

U.S. unions is only one of many reasons that the marine industry continues to lose its competitive edge to foreign rivals. Whatever the real reasons for these losses, the result is the same – fewer and fewer American merchant vessels are sailing each year.

Unfortunately, the deterioration of the active merchant fleet equates to loss job opportunities and has had a significant effect on the seagoing workforce. First, by union rules, to man its vessels the marine industry strictly hires only by the seniority system. This does not allow the younger seamen to develop their skills or for the replacement of senior members with experienced seamen when they retire. Logically, one could expect that these younger, unemployed mariners would form the base for manpower requirements during a national emergency. However, because of their current employment opportunities (or lack there of) many are leaving the maritime industry for other careers. MSC has estimated that over the past 17 years the number of trained mariners not sailing on a regular basis has dropped from 35,000 to 17,000.20 The Navy Merchant Marine Manpower Study, as updated in April of 1987, concluded "the shortfall in meeting the mobilization requirement for the sealift fleet of 1992 would be

substantial."29 Unfortunately, the trend of decreasing trained manpower has continued since the Navy's study and continues to worsen.

In past defense emergencies, the United States Merchant Marine Academy (USMMA) has provided many experienced merchant mariners to serve in the RRF fleet. During Desert Storm, the USMMA contacted more than 7,500 graduates to ask for their service, of that number only 3,000 served. 30 While many were available for activation, the largest percent were either not available or had lost their skills to a degree were they were not able to sail. To offset the acknowledged shortfall in manpower from the commercial fleet and from USMMA, Ms Elaine Chao, Deputy Secretary of Transportation has suggested establishing a merchant marine college scholarship program similar to the current military ROTC program. This program would "produce a corps of several thousand to meet emergency requirements."31 However, Ms Chao's solution does not address the need for merchant mariners with the experience and knowledge to operate the aging vessels in our RRF fleet.

RECOMMENDATIONS

DoD must actively support the re-vitalization of the U.S. Merchant Marine Industry - any student of America's national defense policy must conclude that strategic sealift is one of the major pillars that supports our ability to project military force when and where it is needed. A strong commercial merchant marine industry is the most efficient, least costly method to accomplish this goal. While in many respects a strong industry is affected by elements of the international trading system which are outside DoD's ability to influence, the Department must be in the forefront in supporting the viability of the industry. It can aid in the strengthening the merchant marine industry by advocating such practices as cargo preference laws, cabotage restrictions, operating and construction subsidies. While the current U.S. administration considers such subsidies protectionism, most nations competing with the U.S. for a share of the international market do subsidizes their fleets. Changing U.S. policy in support of such subsidies would greatly improve our Merchant Marine Industry's chances in again becoming competitive worldwide.

Eliminate the National Defense Reserve Fleet - during the largest military deployment in resent history, Desert

Storm, the NDRF failed to accomplish its basic mission, that is to provide the military with a ready strategic sealift fleet. NDRF's vessels were simply too old. too expensive and too slow to meet the needs of the Armed Services. In today's times of scarce resources, the expenditure of scant assets to maintain the fleet simply does not make sound economic sense. With DoD's new emphasis on come as you are wars, it appears logical that the resources which are currently being spend on maintaining the NDRF would pay much higher dividends by being applied to the Ready Reserve Fleet. This action could free resources allowing DoD to procure additional vessels for the RRF. These additions would be more modern, easier to maintain than those currently in the NDRF and they could be maintained at a level where they could react quickly to any short notice contingency -thus fulfilling the Reserve Fleet's basic mission.

Active Army participation in the Ready Reserve Fleet
management — while no one will argue that the business of
MARAD and the U.S. Navy should not be the procurement,
operations and general management of the RRF, the Army must
take an more active role in fleet's management. The Army
knows best what its requirements are for the deployment of
force packages from the United States. In the past it has

been content allowing other agencies to "get them to the war". With today's 3.1 billion dollar mandate from Congress to upgrade and expand the reserve fleet, the Army has a responsibility to insure that the right mix of vessels are bought and maintained. The first step in this "more active role" was taken when the Army assigned an experienced officer to work full time with the Navy in the design of the strategic sealift ships now being planned. However, the next and most important step must be that the Army's senior leadership develops and maintains a long term interest in the sealift issue.

Establishment of a Merchant Marine Reserve Program — the continuous downward trend in merchant mariners, caused by the dwindling peacetime job base that has paralleled the decline of the U.S. merchant marine industry will continue for the foreseeable future. The DoD must take an active role in correcting this situation. The establishment of a ROTC like program, as proposed by Deputy Secretary Chao, appears to be a worthwhile program. Placing these "cadets" into the RRF manning pool and assigning them to RRF vessels for fleet sea trials, deployment exercises, summer cruises and if needed for operations during crisis situations would provide a pool of trained, experience personnel for rapid activation of the fleet when needed.

CONCLUSIONS

"The status and prospects of the United States maritime industries must be of acute national concern because of their historic and current central role in our national security strategy. National Security policy and the national security strategy cannot be carried out without sufficient sealift in time of war or national emergency."

President Ronald Regan 4 May, 1987

Strategic sealift and the nation's security have, since the birth of the United States, been closely tied. Today, sealift unquestionably continues to be a fundamental component in the accomplishment of both the national and military objectives of the United States. This fact was highlighted by the Commission on Merchant Marine and Defense when it stated "...there is no plan for any major overseas military operation, whether it be general war involving the Soviet Union or a contingency operation in some remote corner of the globe, that does not involve the use of the seas for projecting and sustaining American military forces."

Unfortunately, any serious examination of America's merchant marine about its role in supporting the military must come to the same conclusion. The U.S. merchant marine fleet has declined to a point where it cannot meet the

nation's military sealift requirements. This conclusion is based upon a long, but steady decline in its fleet and its workforce. Many private commercial and governmental agencies are working energetically to reverse this trend. However, only an active partnership between the marine industry, the military and the government can reverse the loss of this vital resource.

In developing future political and military strategies our leaders must recognize that the decline of our maritime fleet will have a direct impact on their available options. For without a strong viable merchant marine the U.S. cannot expect to project its military power to regional crisis without foreign assistance.

The Honorable Jeremiah Denton, Chairperson of the Commission on Merchant Marine And Defense best summarized the importance to the United States of a strong merchant marine fleet. He said "...the maritime shortfall cannot continue to be put aside as one of many foreseen shortfalls in the too hard to fix category...without a strong and healthy maritime industry, the United States cannot carry out its basic national security strategy."33

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